

**U.S. Bureau of Land Management  
Arizona Strip Field Office**

**ENVIRONMENTAL ASSESSMENT  
Highway B Catchment**

**AZ-EA-110-05-0006**

**INTRODUCTION**

The Arizona Strip Field Office of the Bureau of Land Management (BLM) and the grazing permittee are working cooperatively to improve grazing management and rangeland health within the Johnson Run Allotment. An allotment management plan is in effect which identifies the need for additional facilities to improve grazing management. In furtherance of cooperative resource conservation, enhancement and management objectives, construction of the Highway B Catchment is proposed on the Johnson Run Allotment.

**PURPOSE AND NEED**

The purpose of the planned Highway B Catchment is to provide dependable water for the Highway B Pasture and east side of the Highway Pasture. To make water available within this area at the present time, the permittee must haul water at considerable expense to an existing storage tank and trough. Moving the existing water facility from its present location to a nearby slope about ¼ of a mile to the southeast would make the installation of a catchment apron possible. This would not only provide reliable water for livestock and wildlife use, but would also allow removal the existing storage tank and trough from the view of travelers along Highway 89A--a major travel corridor.

**Conformance with Land Use Plan**

The proposed action and alternative described below are in conformance with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997, and are consistent with Federal, State and local laws, regulations, and plans. Rangeland management was considered in the Vermillion Grazing EIS of 1979, which was subsequently adopted as management direction in the Arizona Strip District RMP of 1992 (I-1). The Vermillion Grazing EIS states: Additional water sources are needed to provide dependable livestock water in all pastures. . . . catchments [are needed] to provide a source of water to improve livestock distribution on areas where water is presently limited. (1-18).

RMP decisions applicable to this proposed action include:

GZ01 Manage rangeland in accordance with multiple-use objectives, requirements and provisions of established laws, regulation and BLM policies, and the Vermillion Grazing Environmental Impact Statement and Allotment Management Plans, which specify grazing systems, management facilities and land treatments.

GZ06 Continue implementing the Vermillion grazing management program as described in the Grazing Environmental Impact Statement that specifies grazing systems, management facilities and land treatments, provided they are consistent with other Resource Management Plan Decisions.

TE02 Prior to potentially disturbing activities or surface disturbing activities on public land, a special status species review will be conducted by a qualified specialist.

S/V A1 Surface disturbing activities on public land would be reviewed for cultural values by a cultural resource specialist.

### **Relationship to Statutes, Regulations, Other Plans and BLM Guidance**

This proposal is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guides Team. The Secretary of the Interior approved the Standards and Guides in April 1997. The Decision Record, signed by the BLM State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona Land Use Plans.

## **PROPOSED ACTION AND ALTERNATIVE**

### **Proposed Action**

At T. 40 N., R. 1 W., sec. 2 (see referenced map) install a 1600 square foot corrugated steel catchment apron, 10,000 gallon storage tank, drinking trough (the existing trough would be relocated about ¼ mile to the northeast of its present location), and a four strand barb wire fence around the perimeter of the catchment apron to discourage trampling by livestock and wildlife. Bury (either by ripping or trenching) approximately 500 feet of 1¼ inch polyethylene or PVC pipe to gravity feed collected water from the catchment apron to the storage tank and thence to the drinking trough. The trough would be placed between the Highway B and Highway pastures division fence, providing water to both pastures. As part of the proposal a 4000 gallon storage tank would be moved from its present location at T. 40 N., R. 1 W., sec. 2 and relocated to a catchment at T. 39 N., R. 2 W., NE¼NE¼ sec. 1 to provide supplemental water storage at that location. Mitigation for the project would include: excavate only to the extent necessary to install the apron, storage tank, pipeline, trough, and fence; remove all construction debris from the site; and equip the drinking trough with a wildlife escape ramp. Also, since the grazing permittee desires to avoid evaporation loss by turning water off to the trough when his livestock aren't present, the BLM wildlife program would install a small wildlife drinker to accommodate wildlife needs. It is estimated the catchment site would be less than 2 acres in area. Funding for the project (except the wildlife drinker) would be the sole responsibility of the grazing permittee.

The proposed action includes future maintenance activities and any necessary reconstruction for the life of the project which is expected to be at least 50 years. The exact maintenance requirements are not known but are expected to include minor repairs to pipes, the catchment

apron, and fence around the catchment apron.

### **No-Action Alternative**

Under the no-action alternative, the catchment would not be installed on BLM administered lands.

### **AFFECTED ENVIRONMENT**

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected Environment pages III-1 to III-58, and pages 2-1 to 2-47 of the Vermillion Grazing EIS (1979) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Vermillion Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Climate, Vegetation, Threatened or Endangered Plant Species, Riparian Vegetation, Soils, Water Resources, Animals (wildlife), Cultural Resources, Visual Resources, and Land Uses including livestock grazing and recreation.

### **Location and General Setting**

The Highway and Highway B Pastures (Johnson Run Allotment) are located on the Arizona Strip in Coconino County, Arizona approximately 6 miles southeast of Fredonia, Arizona on the north side of Highway 89 A. The land pattern in the area involved includes both BLM-administered public land and blocks of state land controlled by the grazing permittee.

The following critical elements of the human environment are not present or are not affected by the proposed action or alternatives in this EA:

Prime or unique farmlands

Flood plains

Environmental Justice

Native American Religious Concerns

Threatened or Endangered Species

Note: An experimental condor population was introduced on the Arizona Strip District in 1996 and would be unaffected by the proposed action.

Wastes (hazardous or solid)

Wetland Riparian Zones

Wild and Scenic Rivers

Areas of Critical Environmental Concern

Wilderness

### **Elements-Brought Forward for Consideration**

Soil and Air

Vegetation

Wildlife  
Cultural Resources  
Visual Resources  
Recreation

Migratory birds were considered but dropped from further analysis because they would be unaffected by the proposed action or alternatives in this EA.

Soil and Air: Soils are mostly shallow loamy, derived typically from limestone parent material. Air quality within the general area is good, though wind blown dust and smog from urban areas are considered minor sources of pollution. The Arizona Strip District is managed under Class II Ambient Air Quality Standards (prevent substantial decreases in air quality).

Vegetation: Terrain consists of open brushy flats and drainage bottoms; vegetated by sagebrush, cliffrose, ephedra, blue grama, galleta, cheatgrass, and various annual and perennial forbs. Desirable deer browse on the sagebrush ridges includes cliffrose, and isolated patches of fourwing saltbush.

Wildlife: Mammals typical of the area include an occasional pronghorn, mule deer, coyote, bobcat, mountain lion, jackrabbit, cottontail rabbit, ground squirrel, and various rodents. Common avian species include sparrows, jays, woodpeckers, ravens, and various raptors such as red tailed hawks and golden eagles, with possible occasional “flyovers” by protected species such as condors, eagles, falcons, etc. Reptiles include western rattlesnakes, gopher snakes and various lizard species.

Cultural Resources: The area has a representation of a wide range of cultural diversity in its archaeological resources from 11,000 years ago to present. Known Paleo-Indian, Archaic, Anasazi, Paiute, and Historic Cultural manifestations have been reported throughout the region.

Visual Resources: The area involved is classified by BLM as a class 3 visual resource management (VRM) zone. The class 3 VRM has scenic quality which is categorized as good and change should not be in contrast to the landscape.

Recreation: Primary activities that occur in the area are hunting, camping, and back country touring (sightseeing by vehicle). Off-highway vehicle travel in the area is limited to existing roads and trails. The Recreational Opportunity Spectrum System used by BLM describes the area as semi-primitive, motorized activities.

Noxious Weeds: There are currently no known noxious weeds inside the allotment boundary.

## **ENVIRONMENTAL CONSEQUENCES**

### **Impacts of the Proposed Action**

Soil and Air: Excavation would be limited to what is necessary to install the catchment apron, storage tank, pipeline, trough, and fence; but would result in some degree of soil disturbance and compaction. The catchment would allow regular deferment of grazing at the west side of the Highway pasture, reducing impacts of concentrated livestock use.

No impacts to air quality are expected except for a temporary increase in dust from the vehicular and construction activity associated with the project.

Vegetation: Installation of the proposed catchment would cause damage to some species of vegetation. Impacts would occur as a result of vehicular activity in delivering materials and excavation. The area of impact is estimated to total 2 acres.

Overall, the proposed action would benefit vegetative resources in the long term by facilitating improved control of livestock distribution and use, resulting in additional grazing deferments within the Highway pasture of the Johnson Run Allotment. Regular deferment from grazing would improve health, reproduction, and vigor of range plants; plant diversity; ecosystem function; and productivity.

Wildlife: Preparation for the catchment installation would involve surface disturbance and the clearing of some brush which would disturb or alter wildlife habitat in that area. Some small wildlife would be displaced to adjacent habitats. The proposed action would also have the impact of creating dust and noise, temporarily disturbing wildlife in the area.

The rest-rotation grazing system enhanced by this new facility would change livestock distribution and vegetation utilization and improve the long-term ecosystem health within the area involved. Anticipated improvement of the rangeland health would be beneficial to most forms of wildlife over the long run. Any disturbance associated with catchment construction would be offset by the availability of additional water for wildlife.

Cultural Resources: A Class 3 cultural survey was completed and no cultural resources were found in the area of the proposed project work.

Visual Resources: The proposed Highway B Pasture Catchment is within a class 3 VRM zone, involving scenic quality which is categorized as good. Impact on visual quality would be slight, as the catchment would not be visible near the vicinity of Highway 89A. Moreover, the existing storage tank and trough currently visible from Highway 89A would be removed.

Recreation: No impact to recreation users is anticipated. Added water facilitated by the catchment may enhance hunting and wildlife viewing opportunities for recreationists.

Noxious Weeds: There are currently no known noxious weeds inside the allotment boundary. The area is routinely surveyed for new weeds.

## **Impacts of No Action**

Soil and Air: No impact to soil or air would result from this alternative.

Vegetation: The no-action alternative would eliminate the vegetation disturbance associated with installing the new catchment but would also limit options for better livestock control, which would be most beneficial to the vegetative resources.

Wildlife: This alternative would alleviate possible disturbance to wildlife associated with installation of a new catchment, but would preclude availability of additional water.

Cultural Resources: No impacts on cultural resources would result because of this alternative.

Visual Resources: No adverse impacts on visual resources have been identified. However, the existing storage tank and trough currently visible from Highway 89A would remain.

Recreation: No additional impacts on recreation users would result because of this alternative.

## **CUMULATIVE IMPACTS**

Proposed Action: Facilities associated with livestock grazing have been present on the Arizona Strip for over 100 years. Cumulative impacts of the proposed catchment would be insignificant because of the small scale of the project in relation to all the other facilities developed over the years. In the future additional water developments might be proposed for other allotments in order to resolve utilization and livestock distribution problems. For a more complete analysis of cumulative impacts from actions proposed to occur on public lands on the Arizona Strip, refer to the Arizona Strip District Resource Management Plan and Final EIS (1990 pp. III-33 to III-36).

No-Action Alternative: This alternative would eliminate the minor soil and vegetation disturbance associated with installing the catchment; but would limit accomplishment of the objectives and associated improvements in rangeland health, ability to provide additional water for livestock and wildlife, and rule out removal of a derelict storage tank and trough from a major travel corridor.

## **CONSULTATION AND COORDINATION**

This document underwent internal review (Arizona Strip Field Office). The BLM specialists conducting this review were:

Gloria Benson, Native American Coordinator  
Larry Gearhart, Recreation  
Laurie Ford, Lands/Realty/Minerals  
Michael Herder, Wildlife  
John Herron, Cultural  
Lee Hughes, Plants  
Ray Klein, GCPNM Supervisory Ranger  
Linda Price, S&G

Bob Sandberg, Range  
Richard Spotts, Environmental Coordinator  
Ron Wadsworth, Supervisory Law Enforcement

The notice of decision for this EA was sent to those on the ASFO NEPA mailing list.

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Signature of P & E C

## **DECISION RECORD/FINDING OF NO SIGNIFICANT IMPACT**

It is my decision to authorize the proposed action, analyzed in the Environmental Assessment AZ-110-2005-0006, to install a catchment apron and storage tank, and relocate an existing water trough a short distance from its present location in order to gravity feed water from the catchment apron and storage tank to the trough. In conjunction with this a no action alternative was also analyzed. The proposed action was selected in deference to the no action alternative because reliable water would be provided for livestock and wildlife use and better livestock distribution would result on the allotment.

Mitigation for the project includes: excavate only to the extent necessary to install the apron, storage tank, pipeline, trough, and fence; remove all construction debris from the site; equip the drinking trough with a wildlife escape ramp, and install a wildlife drinker.

In addition, any sub-surface archaeological, historical, or paleontological remains discovered during use shall be left intact; all work in the area shall stop immediately and the area manager shall be notified immediately. Recommencement of work shall be allowed upon clearance by the area manager in consultation with the archaeologist. An additional archaeological survey shall be required in the event the proposed project location is changed, or additional surface disturbing activities are added to the project after the initial survey. Any such survey would have to be completed prior to commencement of the project. Also, to avoid the spread of noxious weed seed, excavating equipment should be power washed prior to entering the project area.

Based on the analysis of Environmental Assessment AZ-110-2005-0006, I have determined that the Highway B Catchment will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared.

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Field Manager, Arizona Strip Field Office

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Date